## **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10/072,900 B
Source:	TFW16
Date Processed by STIC:	10/26/2005
	. ,

# ENTERED



IFW16

RAW SEQUENCE LISTING DATE: 10/26/2005
PATENT APPLICATION: US/10/072,900B TIME: 11:56:16

Input Set : A:\11669604.app

Output Set: N:\CRF4\10262005\J072900B.raw

```
3 <110> APPLICANT: ARNOULD-REGUIGNE, ISABELLE
         PRADES, CATHERINE
 4
         NAUDIN, LAURENT
 5
        LEMOINE, CENDRINE
 6
 7
        DEAN, MICHAEL
        DENEFLE, PATRICE
        ROSIER-MONTUS, MARIE-FRANCOISE
 9
11 <120> TITLE OF INVENTION: NUCLEIC ACIDS OF THE HUMAN ABCA12 GENE, VECTORS
         CONTAINING SUCH NUCLEIC ACIDS AND USES THEREOF
14 <130> FILE REFERENCE: 116696-004
16 <140> CURRENT APPLICATION NUMBER: 10/072,900B
17 <141> CURRENT FILING DATE: 2002-02-12
19 <150> PRIOR APPLICATION NUMBER: 60/267,715
20 <151> PRIOR FILING DATE: 2001-02-12
22 <160> NUMBER OF SEQ ID NOS: 40
24 <170> SOFTWARE: PatentIn version 3.3
26 <210> SEQ ID NO: 1
27 <211> LENGTH: 9112
28 <212> TYPE: DNA
29 <213> ORGANISM: Homo sapiens
31 <220> FEATURE:
32 <221> NAME/KEY: modified base
33 <222> LOCATION: (8514)
34 <223> OTHER INFORMATION: a, c, t, g, unknown or other
36 <220> FEATURE:
37 <221> NAME/KEY: modified_base
38 <222> LOCATION: (8546)
39 <223> OTHER INFORMATION: a, c, t, g, unknown or other
41 <220> FEATURE:
42 <221> NAME/KEY: modified base
43 <222> LOCATION: (8566)
44 <223> OTHER INFORMATION: a, c, t, g, unknown or other
46 <220> FEATURE:
47 <221> NAME/KEY: modified base
48 <222> LOCATION: (8679)
49 <223> OTHER INFORMATION: a, c, t, g, unknown or other
51 <220> FEATURE:
52 <221> NAME/KEY: modified base
53 <222> LOCATION: (8798)
54 <223> OTHER INFORMATION: a, c, t, g, unknown or other
56 <400> SEQUENCE: 1
57 gaagagttga ttgagaagtg cctcttggtt aaggattaac cacagggaaa aatccagcag
                                                                          60
```

58 aaacagaaga actgtgggtt tettacccca gccctcaagg aagctatgcc gtgaaagggg

120

## RAW SEQUENCE LISTING DATE: 10/26/2005 PATENT APPLICATION: US/10/072,900B TIME: 11:56:16

Input Set : A:\11669604.app

Output Set: N:\CRF4\10262005\J072900B.raw

```
59 tactgataca ctgacataca gcaagttgga cggggcatca gttcttcatt tgtggagtgg
                                                                         180
60 agaaaagaag aggaaatete teatttqqqq catttqaaqq atqqetteee tqtttcatea
                                                                         240
61 getteagate etggtetgga aaaattgget aggtgtaaaa aggeageege tttggacaet
                                                                         300
62 tgtcttgatc ttatggccag tcattatttt cataattttg gctattactc ggaccaaatt
                                                                         360
63 tectecaact geaaaaceaa ettgttaeet egeacetega aacetteeta gtaetggatt
                                                                         420
64 ctttccattc ctgcagaccc tactctgtga cacagactct aaatgcaaag acacacccta
                                                                         480
65 tggcccacaa gatctgcttc gtaggaaagg aattgatgat gcactattta aagacagtga
                                                                         540
66 gattctgaga aagtcatcca acctggataa ggacagcagt ttatcattcc agagcaccca
                                                                         600
67 agttccagaa agaaggcatq catcactagc cacaqtattt cccaqtccaa qttctqattt
                                                                         660
68 ggaaatcccc ggaacatata ctttcaatgg cagtcaagtg ctcgcacgaa ttcttggctt
                                                                         720
69 ggaaaagctg ttaaagcaaa attcaacttc agaagatata cgaagagaac tatgtgacag
                                                                         780
70 ctattcagga tacattgtgg atgatgcctt ctcttggacc tttctaggaa gaaatgtttt
                                                                         840
71 taacaaattt tgcctttcta acatgaccct tttagagtct tctctccaag aactaaacaa
                                                                         900
72 acagttetee cagetateca gtgaceccaa caateagaag atagtgttte aggaaatagt
                                                                         960
73 cagaatgctg tetttettet cacaagtgca agagcagaaa getgtgtggc agettetgte
                                                                        1020
74 tagttttcca aatgtgtttc agaatgacac atcactaagc aatctatttg atgttcttcg
                                                                        1080
75 aaaggcaaac agtgtgctgc tggttgtgca gaaggtttat ccacgttttg caactaacqa
                                                                        1140
76 aggtttcaga accetecaga agtetgttaa acatetgetg tacactetgg actececage
                                                                        1200
77 tcaaggtgac tccgataata taacgcatgt gtggaatgag gatgatggac agaccttatc
                                                                        1260
78 tecaageagt etggetgeac ageteetaat tetggaaaac tttgaagatg eeetettaaa
                                                                        1320
79 tatatcagca aatagtcctt atattcctta cttggcatgt gtgagaaatg tgactgacag
                                                                        1380
80 tttggccaga ggttcaccag aaaatctaag actcctgcag tccacaatac gatttaaaaa
                                                                        1440
81 atcttttctt cgcaatggtt cctatgaaga ttactttcct ccaqttcctq aaqtcctaaa
                                                                        1500
82 atcaaaactg teteaactte gaaacttgae egaacttett tgtgaatetg aaacttteag
                                                                        1560
83 tttgatagag aagtcatgcc agctctctga tatgagcttt gggagcctgt gtgaagaaag
                                                                        1620
84 tgagtttgat ctgcaactcc tcgaagcggc agagctgggc accgaaatag cagccagctt
                                                                        1680
85 actgtaccat gacaatgtca tatctaaaaa agtgagagat ttgctgactg gagatccaag
                                                                        1740
86 caaaattaat ttaaatatgg atcagtttct agaacaggca ctgcaaatga attacttgga
                                                                        1800
87 aaatatéact cagttaatac cgatcataga agccatgetg catgtcaata acagtgcaga
                                                                        1860
88 tgcttctgaa aagccaggtc agttactaga aatgtttaaa aatgttgaag agctgaaaga
                                                                        1920
89 agatttaagg agaacaacag gaatgtccaa caggactatt gacaagttgc tggccattcc
                                                                        1980
90 catccctgat aatagagctg agattatttc tcaggtgttc tggctgcatt cctqtgatac
                                                                        2040
91 taatatcacc actcccaaac tagaagatgc aatgaaagaa ttctgcaacc tgtctctttc
                                                                        2100
92 agagagatec eggeagtett accteategg acteaceett etgeactact taaacattta
                                                                        2160
93 caacttcaca gacaaggtgt ttttcccgag gaaagatcaa aagccagtag aaaagatgat
                                                                        2220
94 ggagetette ataagaetaa aagagattet caatcagatg gettetggea cacatceget
                                                                        2280
95 gctagacaaa atgagatccc tgaagcaaat gcatctgccc agaagtgttc cattaacaca
                                                                        2340
96 ggcaatgtac agaagcaacc gaatgaacac accacaagga tcatttagca ccatctccca
                                                                        2400
97 agcattatgt teteaaggaa ttaccaetga atatttaaet geeatgetge eetetteeca
                                                                        2460
98 gaggccaaaa ggcaaccaca ccaaggattt tttgacttat aaattaacta aaqaqcaaat
                                                                        2520
99 tgcttcaaaa tatggaattc ccataaatac cacaccattt tqcttctccc tttataaaqa
                                                                        2580
100 catcattaac atgcccgctg gacctqtgat ttqqqctttc ttqaaaccta tqttqttqqq
                                                                         2640
101 aagaattttg catgcaccat ataacccagt cacaaaggca ataatggaaa agtccaatgt
                                                                         2700
102 aactetgaga cagetggegg aattaagaga aaaateteaa gagtggatgg ataagtegee
                                                                         2760
103 actiticatg aatteettee atetgitaaa eeaggeaatt eeaatgetee agaataetet
                                                                         2820
104 aaggaaccet tttgtgcaag tttttgtaaa gttctccgtg ggactcgatg ctgttgaact
                                                                         2880
105 attgaaacag atagatgaac tcgatattct aagactgaaa ttagagaaca acattgacat
                                                                         2940
106 categateag ettaacacae tatetteeet gacagtaaat attteetett gtgtattata
                                                                         3000
107 tgaccgtatt caggcagcaa aaaccataga tgaaatggag agagaggcta aaaggctcta
                                                                         3060
```

# RAW SEQUENCE LISTING DATE: 10/26/2005 PATENT APPLICATION: US/10/072,900B TIME: 11:56:16

Input Set : A:\11669604.app

Output Set: N:\CRF4\10262005\J072900B.raw

108	caaaagcaac	gaactctttg	gaagtgttat	ttttaagctt	ccttctaaca	gaagctggca	3120
				tcctcctgtc			3180
				cctaagaacc			3240
				tggcagggct			3300
112	tattgaaaga	gcaatcattg	aattgcaaac	tggaaggaac	tcccaggaaa	tagcagtcca	3360
113	ggttcaagca	attccttatc	cctgcttcat	gaaagacaac	ttcctaacca	gtgtctctta	3420
114	ttctcttcca	attgtgctta	tggttgcctg	ggttgtattt	atagctgcct	ttgtaaaaaa	3480
				tgagtacatg			3540
116	ctgcagccat	ttctttgcct	ggcttataga	gagtgttgga	tttttactgg	ttaccatcgt	3600
				tattcttcct			3660
				ggttattgcc			3720
				gatcggaagc			3780
120	ctttccattt	attgttctgg	ttacagtgga	gaatgagttg	agctatgtat	tgaaagtgtt	3840
121	catgagcctg	ctgtccccaa	cagcattcag	ctatgcaagc	caatacattg	cacgatacga	3900
122	agaacagggc	attggtcttc	agtgggaaaa	tatgtacacc	tccccggttc	aggatgacac	3960
123	cacctcattt	ggctggctgt	gctgtctaat	cctagctgac	tctttcattt	atttccttat	4020
124	tgcttggtat	gtcaggaatg	tcttcccagg	gacatacggt	atggcagctc	cctggtattt	4080
125	tccaattctt	ccttcctatt	ggaaggagcg	atttgggtgt	gcagaggtga	agcctgagaa	4140
				gatgcagaac			4200
				tgaacctaaa			4260
				aaaagttgct			4320
				ggggcccaat			4380
				ctcagcaggc			4440
				gaagaacatg			4500
				gcaccttctc			4560
				ggaagtaaaa			4620
				aacactgtca			4680
				aagggtagta			4740
				atgggatgtt			4800
				ggacgaggct			4860
				ctgtgggtcc			4920
				caagaagaag			4980
				aatgatccaa			5040
				ttatgtactt			5100
				actcgacaat			5160
				ggaggaggtc			5220
				gcacttaaca	_		5280
				tttatctgtg			5340
				gaggctggat			5400
				ccaccacacc			5460
				tgttaccact			5520
				tcagatctcc			5580
	-			cccgagcacg		_	5640
				tctgaacacc			5700
				tggagaaccc			5760
				taaatttaac			5820
				cactgggcaa			5880
				atatggaggt			5940
156	gacaaaagac	cttcgttttg	atataacagg	agtccctgcc	aatagaacac	ttgccaaggt	6000

#### RAW SEQUENCE LISTING DATE: 10/26/2005 PATENT APPLICATION: US/10/072,900B TIME: 11:56:16

Input Set : A:\11669604.app
Output Set: N:\CRF4\10262005\J072900B.raw

			·	•			
157	atggtatgat	ccagaaggct	atcactccct	tccagcttac	ctcaacagcc	tgaataattt	6060
158	ccttctgcga	gttaacatgt	caaaatacga	tgctgcccga	catggcatca	tcatgtatag	6120
159	ccatccttat	ccaggagtgc	aagaccaaga	acaagccaca	atcagcagtt	taatcgatat	6180
160	tttagtggca	ctgtctatct	tgatgggcta	ctctgtcacc	accgccagct	ttgtcaccta	6240
			ccaaagccaa				6300
			acttcattta				6360
			cgattttcaa				6420
			ttctcctgtt				6480
			aaacaggaat				6540
			ttgtttccct		-		6600
			aacttatttc				6660
			acggtttgat				6720
			tggaataccc				6780
			tttctcaggg				6840
			aactcaggct				6900
			atgaagatgt				6960
			tccaacttta				7020
			acaacatcag				7080
			caggaaagac				7140
			ttctgatcag				7200
			gctactgtcc				7260
			tctatgccag				7320
179	agaaactgtt	cataaactcc	ttaggagact	tcacctgatg	cccttcaagg	acagagetae	7380
			caaaaagaaa				7440
			atgagccgag				7500
182	cctctggaag	atcatttcag	aagaagtaca	gaacaaatgt	tccgtcatcc	tcacatctca	7560
			ctctctgtac				7620
184	tcaatgtatt	ggatctttgc	agcacataaa	gagcaggttt	ggacgaggat	ttactgtcaa	7680
185	agttcacttg	aagaataaca	aagtgaccat	ggagaccctc	acaaagttca	tgcagctgca	7740
186	ctttccaaaa	acatacttaa	aagatcagca	cctcagcatg	ctagagtatc	atgtaccagt	7800
187	cacagcagga	ggagtcgcaa	acatttttga	tctgctggaa	accaacaaga	ctgctttaaa	7860
188	tattacaaat	ttcttagtga	gtcagaccac	tctggaagag	gttttcatca	actttgccaa	7920
189	agaccagaag	tcctatgaaa	ctgctgatac	cagcagccaa	ggttccacta	taagtgttga	7980
190	ctcacaagat	gaccagatgg	agtcttaaca	cttccagcaa	actcaatctc	agcgtgtgac	8040
191	caatggcttc	attttgaaga	aaagccacag	aagatacact	tccgcaagat	atcttcattt	8100
192	taaagtaaag	taatatactg	tatggaaagt	tacaactgtg	ttagactaac	aagtaattat	8160
193	aaaaggaaat	ttttccttct	aaggtcagtg	agtgttgttg	ctactgaaat	gaattcctgt	8220
194	atactcaaca	ctgtgagcat	gctaatgtat	atgctggtga	ttcttatgca	aaggtgaagc	8280
195	cacctcaaga	tgaatatctt	aatttattac	tttcaataaa	aagacagttt	aaaaggcatg	8340
196	gattttggta	gttgaaatat	aagagtggag	aagaaaagtc	agatggtttg	tggcaggtgc	8400
197	caccgggcaa	gcagacaaca	taatttattt	ccagaaaaca	acagaatgaa	catcatcatg	8460
198	aatacatgaa	tcggctgtga	tgtgtgaact	gctaagggcc	aaatgaacgt	ttgnagagca	8520
			gtatgngtat				8580
200	acgtgctgaa	cccgaaaaaa	agtgcctttc	cataaggact	gcaatagaga	gggcaattta	8640
			tagattcact				8700
			tgctctgggg				8760
			aagagaatcc				8820
			atttggggtt				8880
205	aacgaatatg	aagataattt	tcagctaatt	atctgggtga	cccagaatcg	tgtatatggc	8940

RAW SEQUENCE LISTING DATE: 10/26/2005
PATENT APPLICATION: US/10/072,900B TIME: 11:56:16

Input Set : A:\11669604.app

Output Set: N:\CRF4\10262005\J072900B.raw

206 tataggatag acttettaat aatggeaagt gaegtggeee tggggaaagg tgetttatgt 207 accepteted cetestates terestates tacaagttie teagettieg cateactett 9060 208 tgtctcgaaa accaataaac tcaaagttta gaaaaaactca aaaaaaaaa aa 9112 211 <210> SEQ ID NO: 2 212 <211> LENGTH: 8875 213 <212> TYPE: DNA 214 <213> ORGANISM: Homo sapiens 216 <220> FEATURE: 217 <221> NAME/KEY: modified base 218 <222> LOCATION: (5346) 219 <223> OTHER INFORMATION: a, c, t, g, unknown or other 221 <220> FEATURE: 222 <221> NAME/KEY: modified base 223 <222> LOCATION: (8277) 224 <223> OTHER INFORMATION: a, c, t, g, unknown or other 226 <220> FEATURE: 227 <221> NAME/KEY: modified base 228 <222> LOCATION: (8309) 229 <223> OTHER INFORMATION: a, c, t, g, unknown or other 231 <220> FEATURE: 232 <221> NAME/KEY: modified base 233 <222> LOCATION: (8329) 234 <223> OTHER INFORMATION: a, c, t, g, unknown or other 236 <220> FEATURE: 237 <221> NAME/KEY: modified\_base 238 <222> LOCATION: (8442) 239 <223> OTHER INFORMATION: a, c, t, g, unknown or other 241 <220> FEATURE: 242 <221> NAME/KEY: modified base 243 <222> LOCATION: (8561) 244 <223> OTHER INFORMATION: a, c, t, g, unknown or other 246 <400> SEQUENCE: 2 247 gaagagttga ttgagaagtg cctcttggtt aaggattaac cacagggaaa aatccagcag 60 248 aaacagaaga actgtgggtt tcttacccca gccctcaagg aagctatgcc gtgaaagggg 120 249 tactgataca ctgacataca gcaagttgga cggggcatca gttcttcatt tgtggagtgg 180 250 agaaaagaag aggaaatctc tcatttgggg catttgaagg atggcttccc tgtttcatca 240 251 gcttcagatc ctggtctgga aaaattggct aggtgtaaaa aggcagccgc tttggacact 300 252 tgtcttgatc ttatqqccaq tcattatttt cataattttq qctattactc qqaccaaatt 360 253 teetecaact geaaaaceaa ettgttaeet egeacetega aacetteeta gtaetggatt 420 254 ctttccattc ctgcagaccc tactctgtga cacagactct aaatgcaaag acacacccta 480 255 tggcccacaa gatctgcttc gtaggaaagg aattgatgat gcactattta aagacagtga 256 gattetgaga aagteateea aeetggataa ggacageagt ttateattee agageaeeca 600 257 agttccagaa agaaggcatg catcactagc cacagtattt cccagtccaa gttctgattt 660 258 ggaaatcccc ggaacatata ctttcaatgg cagtcaagtg ctcgcacgaa ttcttggctt 720 259 ggaaaagctg ttaaagcaaa attcaacttc agaagatata cgaagagaac tatgtgacag 780 260 ctattcagga tacattgtgg atgatgcctt ctcttggacc tttctaggaa gaaatgtttt 840 261 taacaaattt tgcctttcta acatgaccct tttagagtct tctctccaag aactaaacaa 900 262 acagttetee cagetateea gtgaeeecaa caateagaag atagtgttte aggaaatagt 960 263 cagaatgetg tetttettet cacaagtgea agageagaaa getgtgtgge agettetgte 1020 RAW SEQUENCE LISTING ERROR SUMMARY PATENT APPLICATION: US/10/072,900B

DATE: 10/26/2005 TIME: 11:56:17

Input Set : A:\11669604.app

Output Set: N:\CRF4\10262005\J072900B.raw

#### Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which/presents at least one n or Xaa. 1

Seq#:1; N Pos. 8514,8546,8566,8679,8798 Seq#:2; N Pos. 5346,8277,8309,8329,8442,8561

Seq#:5; Xaa Pos. 1740 Seq#:6; Xaa Pos. 1709

#### VERIFICATION SUMMARY

PATENT APPLICATION: US/10/072,900B

DATE: 10/26/2005 TIME: 11:56:17

Input Set : A:\11669604.app

Output Set: N:\CRF4\10262005\J072900B.raw

L:198 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:8460

M:341 Repeated in SeqNo=1

L:336 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:5340

M:341 Repeated in SeqNo=2

L:1024 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:1728 L:1519 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:1696